

**BLASTP 2.2.9 [May-01-2004]****Reference:**

Altschul, Stephen F., Thomas L. Madden, Alejandro A. Schäffer, Jinghui Zhang, Zheng Zhang, Webb Miller, and David J. Lipman (1997), "Gapped BLAST and PSI-BLAST: a new generation of protein database search programs", Nucleic Acids Res. 25:3389-3402.

RID: 1090609648-17940-165008587775.BLASTQ4

**Query=**

(26 letters)

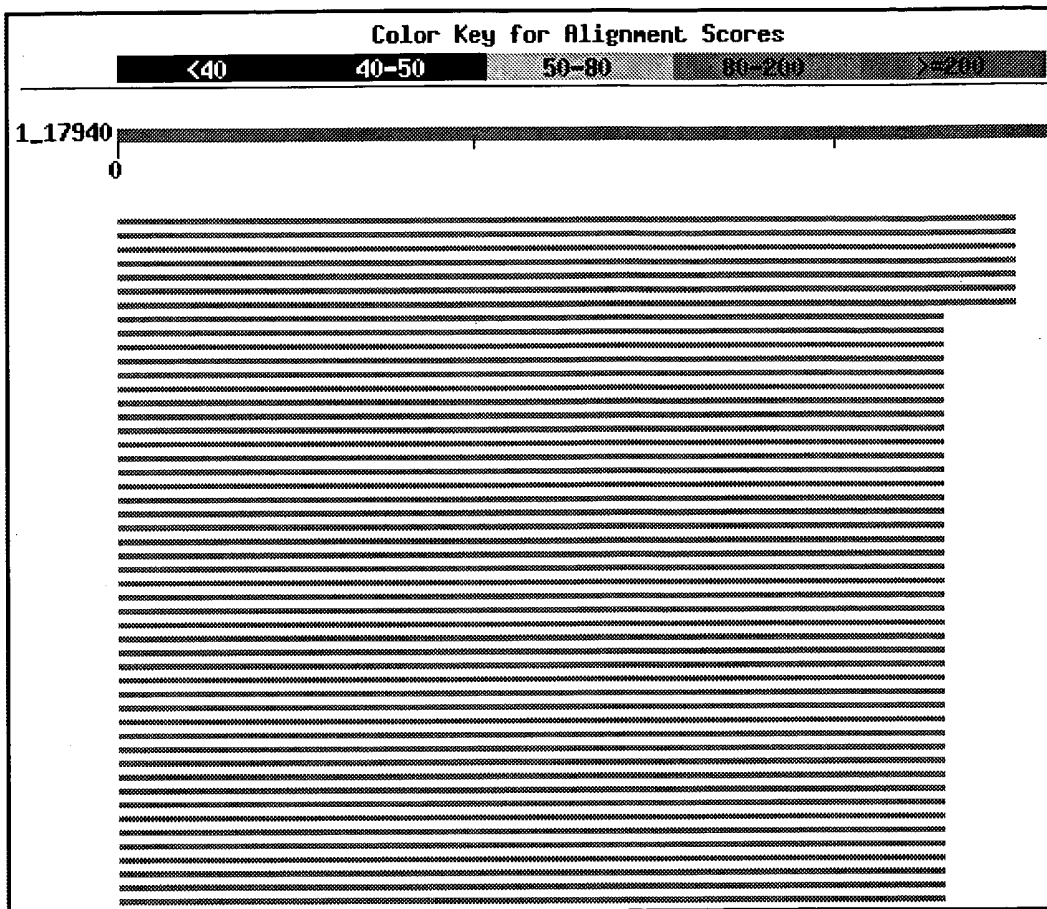
**Database:** All non-redundant GenBank CDS  
translations+PDB+SwissProt+PIR+PRF excluding environmental samples  
1,838,829 sequences; 614,976,940 total letters

If you have any problems or questions with the results of this search  
please refer to the **BLAST FAQs**

Taxonomy reports

**Distribution of 100 Blast Hits on the Query Sequence**

Mouse-over to show defline and scores. Click to show alignments



Sequences producing significant alignments:

		Score (bits)	E Value
<a href="#">gi 6537688 gb AAF15686.1 </a>	surface antigen [Hepatitis B virus]	91	3e-18
<a href="#">gi 28412176 gb AAO40321.1 </a>	surface antigen [Hepatitis B virus]	87	5e-17
<a href="#">gi 4884874 gb AAD31851.1 </a>	surface antigen [Hepatitis B virus]	87	5e-17
<a href="#">gi 30026416 gb AAP06615.1 </a>	S protein [Hepatitis B virus]	84	3e-16
<a href="#">gi 1359704 emb CAA66446.1 </a>	pre-S2 protein [Hepatitis B virus]	84	4e-16
<a href="#">gi 30026343 gb AAP06552.1 </a>	middle S protein [Hepatitis B vi...	84	4e-16
<a href="#">gi 30983650 gb AAP40772.1 </a>	large S protein [Hepatitis B virus]	84	4e-16
<a href="#">gi 6692573 gb AAF24741.1 </a>	large S protein [Hepatitis B virus]	84	4e-16
<a href="#">gi 18699356 gb AAL78544.1 </a>	surface antigen [Hepatitis B virus]	84	4e-16
<a href="#">gi 29124910 gb AAO63535.1 </a>	envelope protein [Hepatitis B vi...	84	4e-16
<a href="#">gi 30983652 gb AAP40774.1 </a>	S protein [Hepatitis B virus]	84	4e-16
<a href="#">gi 27261547 gb AAN85922.1 </a>	surface antigen [Hepatitis B vir...	84	4e-16
<a href="#">gi 6692574 gb AAF24742.1 </a>	middle S protein [Hepatitis B virus]	84	4e-16
<a href="#">gi 6692567 gb AAF24735.1 </a>	large S protein [Hepatitis B virus]	84	4e-16
<a href="#">gi 37674548 gb AAQ96928.1 </a>	S protein [Hepatitis B virus]	84	4e-16
<a href="#">gi 6537851 gb AAF15849.1 </a>	surface antigen [Hepatitis B viru...	84	4e-16
<a href="#">gi 30983661 gb AAP40782.1 </a>	middle S protein [Hepatitis B vi...	84	4e-16
<a href="#">gi 30026443 gb AAP06638.1 </a>	large S protein [Hepatitis B virus]	84	4e-16
<a href="#">gi 19224215 gb AAL86446.1 </a>	large S protein [Hepatitis B virus]	84	4e-16
<a href="#">gi 30026386 gb AAP06589.1 </a>	middle S protein [Hepatitis B vi...	84	4e-16
<a href="#">gi 18699348 gb AAL78540.1 </a>	surface antigen [Hepatitis B virus]	84	4e-16
<a href="#">gi 18699467 gb AAL78599.1 </a>	surface antigen [Hepatitis B virus]	84	4e-16
<a href="#">gi 30983606 gb AAP40734.1 </a>	S protein [Hepatitis B virus]	84	4e-16

<a href="#">gi 38147025 gb AAP44480.1 </a>	large S protein [Hepatitis B virus]	<a href="#">84</a>	4e-16
<a href="#">gi 11321156 gb AAG34077.1 </a>	carrier-surface protein [Hepatit...	<a href="#">84</a>	4e-16
<a href="#">gi 32346298 gb AAO41327.1 </a>	preS1/preS2 surface protein [Hep...	<a href="#">84</a>	4e-16
<a href="#">gi 6692575 gb AAF24743.1 </a>	S protein [Hepatitis B virus]	<a href="#">84</a>	4e-16
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<a href="#">gi 484566 pir  JQ2058</a>	surface antigen - hepatitis B virus (...)	<a href="#">84</a>	4e-16
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<a href="#">gi 11321150 gb AAG34074.1 </a>	carrier-surface protein [Hepatit...	<a href="#">84</a>	4e-16
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<a href="#">gi 1359697 emb CAA66436.1 </a>	pre-S2 protein [Hepatitis B virus]	<a href="#">84</a>	4e-16
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<a href="#">gi 6692526 gb AAF24694.1 </a>	large S protein [Hepatitis B virus]	<a href="#">84</a>	4e-16
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<a href="#">gi 29124928 gb AAO63546.1 </a>	envelope protein [Hepatitis B vi...	<u>84</u>	4e-16
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<a href="#">gi 11321128 gb AAG34063.1 </a>	carrier-surface protein [Hepatit...	<u>84</u>	4e-16
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<a href="#">gi 32346286 gb AAO41318.1 </a>	preS1/preS2 surface protein [Hep...	<u>84</u>	4e-16
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<a href="#">gi 138793 sp P17397 VMSA_HPBVI</a>	MAJOR SURFACE ANTIGEN PRECUR...	<u>84</u>	4e-16
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<a href="#">gi 9454474 gb AAF87834.1 </a>	preS1/preS2/S envelope protein [H...	<u>84</u>	4e-16
<a href="#">gi 11321110 gb AAG34054.1 </a>	carrier-surface protein [Hepatit...	<u>84</u>	4e-16
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<a href="#">gi 138796 sp P17399 VMSA_HPBVO</a>	MAJOR SURFACE ANTIGEN PRECUR...	<u>84</u>	4e-16

### Alignments

Get selected sequences

Select all

Deselect all

☐ [>gi|6537688|gb|AAF15686.1|](#) surface antigen [Hepatitis B virus]  
Length = 63

Score = 90.6 bits (206), Expect = 3e-18  
Identities = 26/26 (100%), Positives = 26/26 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTDRN 26  
CKTCTTPAQGTSMFPSCCCTKPTDRN  
Sbjct: 8 CKTCTTPAQGTSMFPSCCCTKPTDRN 33

☐ [>gi|28412176|gb|AAO40321.1|](#) surface antigen [Hepatitis B virus]  
Length = 42

Score = 86.7 bits (197), Expect = 5e-17  
Identities = 25/26 (96%), Positives = 25/26 (96%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTDRN 26  
CKTCTTPAQG SMFPSCCCTKPTDRN  
Sbjct: 8 CKTCTTPAQGNSMFPSCCCTKPTDRN 33

☐ [>gi|4884874|gb|AAD31851.1|](#) surface antigen [Hepatitis B virus]  
Length = 226

Score = 86.7 bits (197), Expect = 5e-17  
Identities = 25/26 (96%), Positives = 25/26 (96%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTDRN 26  
CKTCTTPAQG SMFPSCCCTKPTDRN  
Sbjct: 121 CKTCTTPAQGNSMFPSCCCTKPTDRN 146

☐ >[gi|30026416|gb|AAP06615.1|](#) S protein [Hepatitis B virus]  
Length = 226

Score = 84.2 bits (191), Expect = 3e-16  
Identities = 25/26 (96%), Positives = 25/26 (96%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTDRN 26  
CKTCTTPAQGTSMFPSCCCTKPTD N  
Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTDAN 146

☐ >[gi|1359704|emb|CAA66446.1|](#) pre-S2 protein [Hepatitis B virus]  
Length = 281

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 176 CKTCTTPAQGTSMFPSCCCTKPTD 199

☐ >[gi|30026343|gb|AAP06552.1|](#) middle S protein [Hepatitis B virus]  
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Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

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CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 176 CKTCTTPAQGTSMFPSCCCTKPTD 199

☐ >[gi|30983650|gb|AAP40772.1|](#) large S protein [Hepatitis B virus]  
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Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >[gi|6692573|gb|AAF24741.1|](#) large S protein [Hepatitis B virus]  
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Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD

Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >[gi|18699356|gb|AAL78544.1|](#) surface antigen [Hepatitis B virus]  
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Identities = 24/24 (100%), Positives = 24/24 (100%)

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CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 100 CKTCTTPAQGTSMFPSCCCTKPTD 123

☐ >[gi|29124910|gb|AAO63535.1|](#) envelope protein [Hepatitis B virus]  
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Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

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Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

☐ >[gi|30983652|gb|AAP40774.1|](#) S protein [Hepatitis B virus]  
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Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

☐ >[gi|27261547|gb|AAN85922.1|](#) surface antigen [Hepatitis B virus]  
[gi|27261587|gb|AAN85929.1|](#) surface antigen [Hepatitis B virus]  
Length = 400

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >[gi|6692574|gb|AAF24742.1|](#) middle S protein [Hepatitis B virus]  
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Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 176 CKTCTTPAQGTSMFPSCCCTKPTD 199

☐ >[gi|6692567|gb|AAF24735.1|](#) large S protein [Hepatitis B virus]  
Length = 400

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Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >[gi|37674548|gb|AAQ96928.1|](#) S protein [Hepatitis B virus]  
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Sbjct: 72 CKTCTTPAQGTSMFPSCCCTKPTD 95

☐ >[gi|6537851|gb|AAF15849.1|](#) surface antigen [Hepatitis B virus]  
[gi|6537852|gb|AAF15850.1|](#) surface antigen [Hepatitis B virus]  
[gi|6537853|gb|AAF15851.1|](#) surface antigen [Hepatitis B virus]  
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Sbjct: 8 CKTCTIPAQGTSMFPSCCCTKPSDRN 33

☐ >[gi|30983661|gb|AAP40782.1|](#) middle S protein [Hepatitis B virus]  
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Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 176 CKTCTTPAQGTSMFPSCCCTKPTD 199

☐ >[gi|30026443|gb|AAP06638.1|](#) large S protein [Hepatitis B virus]

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Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
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Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >[gi|19224215|gb|AAL86446.1|](#) large S protein [Hepatitis B virus]  
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Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >[gi|30026386|gb|AAP06589.1|](#) middle S protein [Hepatitis B virus]  
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Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
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☐ >[gi|18699348|gb|AAL78540.1|](#) surface antigen [Hepatitis B virus]  
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Score = 83.8 bits (190), Expect = 4e-16  
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Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
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Sbjct: 100 CKTCTTPAQGTSMFPSCCCTKPTD 123

☐ >[gi|18699467|gb|AAL78599.1|](#) surface antigen [Hepatitis B virus]  
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Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 100 CKTCTTPAQGTSMFPSCCCTKPTD 123



□ >gi|30983606|gb|AAP40734.1| S protein [Hepatitis B virus]  
Length = 226

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

□ >gi|38147025|gb|AAP44480.1| large S protein [Hepatitis B virus]  
Length = 400

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

□ >gi|11321156|gb|AAG34077.1| carrier-surface protein [Hepatitis B virus]  
Length = 128

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 100 CKTCTTPAQGTSMFPSCCCTKPTD 123

□ >gi|32346298|gb|AAO41327.1| preS1/preS2 surface protein [Hepatitis B virus]  
Length = 400

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

□ >gi|6692575|gb|AAF24743.1| S protein [Hepatitis B virus]  
Length = 226

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

□ >gi|30983651|gb|AAP40773.1| middle S protein [Hepatitis B virus]  
Length = 281

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 176 CKTCTTPAQGTSMFPSCCCTKPTD 199

□ >gi|6537882|gb|AAF15880.1| surface antigen [Hepatitis B virus]  
Length = 63

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/26 (92%), Positives = 25/26 (96%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTDRN 26  
CKTCT PAQGTSMFPSCCCTKP+DRN  
Sbjct: 8 CKTCTIPAQGTSMFPSCCCTKPSDRN 33

□ >gi|18699469|gb|AAL78600.1| surface antigen [Hepatitis B virus]  
Length = 128

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 100 CKTCTTPAQGTSMFPSCCCTKPTD 123

□ >gi|30026331|gb|AAP06542.1| S protein [Hepatitis B virus]  
Length = 226

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

□ >gi|32346302|gb|AAO41330.1| preS1/preS2 surface protein [Hepatitis B virus]  
Length = 400

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD

Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >[gi|6537691|gb|AAF15689.1|](#) surface antigen [Hepatitis B virus]  
Length = 63

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24

CKTCTTPAQGTSMFPSCCCTKPTD

Sbjct: 8 CKTCTTPAQGTSMFPSCCCTKPTD 31

☐ >[gi|1359703|emb|CAA66445.1|](#) pre-S1 protein [Hepatitis B virus]  
[gi|9454479|gb|AAF87838.1|](#) preS1/preS2/S envelope protein [Hepatitis B virus]  
Length = 400

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24

CKTCTTPAQGTSMFPSCCCTKPTD

Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >[gi|37674636|gb|AAQ96972.1|](#) S protein [Hepatitis B virus]  
Length = 113

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24

CKTCTTPAQGTSMFPSCCCTKPTD

Sbjct: 72 CKTCTTPAQGTSMFPSCCCTKPTD 95

☐ >[gi|37674638|gb|AAQ96973.1|](#) S protein [Hepatitis B virus]  
Length = 113

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24

CKTCTTPAQGTSMFPSCCCTKPTD

Sbjct: 72 CKTCTTPAQGTSMFPSCCCTKPTD 95

☐ >[gi|15077858|gb|AAK83381.1|](#) S protein [Hepatitis B virus]  
[gi|30026344|gb|AAP06553.1|](#) S protein [Hepatitis B virus]  
Length = 226

Score = 83.8 bits (190), Expect = 4e-16

Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

☐ >gi|18699334|gb|AAL78533.1| surface antigen [Hepatitis B virus]  
Length = 128

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 100 CKTCTTPAQGTSMFPSCCCTKPTD 123

☐ >gi|329629|gb|AAA45482.1| surface antigen [Hepatitis B virus]  
Length = 281

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 176 CKTCTTPAQGTSMFPSCCCTKPTD 199

☐ >gi|30983609|gb|AAP40737.1| large S protein [Hepatitis B virus]  
Length = 400

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >gi|6537707|gb|AAF15705.1| surface antigen [Hepatitis B virus]  
Length = 63

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/26 (92%), Positives = 25/26 (96%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTDRN 26  
CKTCT PAQGTSMFPSCCCTKP+DRN  
Sbjct: 8 CKTCTIPAQGTSMFPSCCCTKP+SDRN 33

☐ >gi|484566|pir||JQ2058 surface antigen - hepatitis B virus (subtype adw2, strain  
gi|1359699|emb|CAA66441.1| S protein [Hepatitis B virus]

Length = 226

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

☐ >[gi|30026438|gb|AAP06634.1|](#) S protein [Hepatitis B virus]  
Length = 226

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

☐ >[gi|11321150|gb|AAG34074.1|](#) carrier-surface protein [Hepatitis B virus]  
Length = 128

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 100 CKTCTTPAQGTSMFPSCCCTKPTD 123

☐ >[gi|18699350|gb|AAL78541.1|](#) surface antigen [Hepatitis B virus]  
Length = 128

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 100 CKTCTTPAQGTSMFPSCCCTKPTD 123

☐ >[gi|8894942|gb|AAF80665.1|](#) HBsAg [Hepatitis B virus]  
Length = 98

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 13 CKTCTTPAQGTSMFPSCCCTKPTD 36

☐ >[gi|4105295|gb|AAD02347.1|](#) surface antigen [Hepatitis B virus]  
Length = 98

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 13 CKTCTTPAQGTSMFPSCCCTKPTD 36

☐ >[gi|30983660|gb|AAP40781.1|](#) large S protein [Hepatitis B virus]  
Length = 400

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 295 CKTCTTPAQGTSMFPSCCCTKPTD 318

☐ >[gi|3335604|gb|AAD13366.1|](#) surface antigen [Hepatitis B virus]  
Length = 61

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 12 CKTCTTPAQGTSMFPSCCCTKPTD 35

☐ >[gi|30026445|gb|AAP06640.1|](#) S protein [Hepatitis B virus]  
Length = 226

Score = 83.8 bits (190), Expect = 4e-16  
Identities = 24/24 (100%), Positives = 24/24 (100%)

Query: 1 CKTCTTPAQGTSMFPSCCCTKPTD 24  
CKTCTTPAQGTSMFPSCCCTKPTD  
Sbjct: 121 CKTCTTPAQGTSMFPSCCCTKPTD 144

Get selected sequences

Select all

Deselect all

Database: All non-redundant GenBank CDS  
translations+PDB+SwissProt+PIR+PRF excluding environmental samples  
Posted date: Jul 23, 2004 12:53 AM  
Number of letters in database: 614,976,940  
Number of sequences in database: 1,838,829

Lambda	K	H
0.359	0.280	2.04

#### Gapped

Lambda	K	H
0.294	0.110	0.610

Matrix: PAM30

Gap Penalties: Existence: 9, Extension: 1

Number of Hits to DB: 9,363,602

Number of Sequences: 1838829

Number of extensions: 233017

Number of successful extensions: 2104

Number of sequences better than 20000.0: 2072

Number of HSP's better than 20000.0 without gapping: 2072

Number of HSP's successfully gapped in prelim test: 0

Number of HSP's that attempted gapping in prelim test: 0

Number of HSP's gapped (non-prelim): 2100

length of query: 26

length of database: 614,976,940

effective HSP length: 16

effective length of query: 10

effective length of database: 585,555,676

effective search space: 5855556760

effective search space used: 5855556760

T: 11

A: 40

X1: 14 ( 7.3 bits)

X2: 35 (14.8 bits)

X3: 58 (24.6 bits)

S1: 36 (20.5 bits)

S2: 36 (18.5 bits)